BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of the work: **Estimate for Improvements to roads and drains at Sahakaranagara surroundings in ward no. 8, kodigehalli sub-division**

							Estimate Cost:		4900000.00
Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
1	1321 Hire charges of 100 KVA generator including operator, fuel, transportation and handling charges PWD SR 2013-14, P. L, I. 92 for pumping of stagnated water in existisng drain								
	For dewatering in drains of balaji layout	Hours	4	15.00			60.00	495.00	29700.00
2	KSRRB 300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications MORTH chapter 3. Page No. 138 / Item No. 19.1/ PWD SR 2014-15								
	Drain desilting in balaji layout								
	6th cross road 6th sub cross	Cum	2	202.50	0.50	0.50	101.25		
	6th cross road 7th sub cross	Cum	2	202.50	0.50	0.50	101.25		
	6th cross road 8th sub cross	Cum	2	202.50	0.50	0.50	101.25		
	6th cross road 9th sub cross	Cum	2	202.50	0.50	0.50	101.25		
	6th cross road 10th sub cross	Cum	2	135.00	0.50	0.50	67.50		
	Hebbal lake road	Cum	2	180.00	0.50	0.50	90.00		
	5th cross, 7th cross road	Cum	2	135.00	0.50	0.50	67.50		
	5th cross, 8th cross road	Cum	2	135.00	0.50	0.50	67.50		
	5th cross, 9th cross road	Cum	2	135.00	0.50	0.50	67.50		
	1st main road	Cum	2	103.50	0.50	0.50	51.75		
	2nd main road	Cum	2	162.00	0.50	0.50	81.00		
	3rd main road	Cum	2	162.00	0.50	0.50	81.00		
	4th main road	Cum	2	162.00	0.50	0.50	81.00		
	5th main road	Cum	2	148.50	0.50	0.50	74.25		
	6th main road	Cum	2	153.00	0.50	0.50	76.50		
	7th main road	Cum	2	112.50	0.50	0.50	56.25		
	8th main road	Cum	2	180.00	0.50	0.50	90.00		
	culverts across cross roads in balaji layout and sahakarnagar	Cum	13	5.90	2.20	1.20	202.49		
	Pot hole filling - cross roads of sahakarnagara	Cum	50	2.00	2.50	0.30	75.00		
							1634.24	75.60	123548.00
	Basic Rate	70.00							
	Area Weightage @8%	5.60							
	Total	75.60							
3	Removing B.S Slab of Drain and stacking Page No. 25 / Item No. 5.32 / PWD SR 2014-15								
	6th cross road 6th sub cross	Sqm	2	202.50	1.65		668.25		
	6th cross road 7th sub cross	Sqm	2	202.50	1.65		668.25		
	6th cross road 8th sub cross	Sqm	2	202.50	1.65		668.25		
	6th cross road 9th sub cross	Sqm	2	202.50	1.65		668.25		
	6th cross road 10th sub cross	Sqm	2	135.00	1.65		445.50		
	5th cross, 7th cross road	Sqm	2	135.00	1.65		445.50		
	5th cross, 8th cross road	Sqm	2	135.00	1.65		445.50		
	5th cross, 9th cross road	Sqm	2	135.00	1.65		445.50		
	1st main road	Sqm	2	103.50	1.65		341.55		

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	2nd main road	Sqm	2	162.00	1.65		534.60		
	3rd main road	Sqm	2	162.00	1.65		534.60		
	4th main road	Sqm	2	162.00	1.65		534.60		
	5th main road	Sqm	2	148.50	1.65		490.05		
	6th main road	Sqm	2	153.00	1.65		504.90		
	7th main road	Sqm	2	112.50	1.65		371.25		
	8th main road	Sqm	2	180.00	1.65		594.00		
							8360.55	58.32	487587.00
	Basic Rate	54.00							
	Area Weightage @ 8%	4.32							
	Total	58.32							
4	KSRRB M300-53. Construction of embankment with approved material deposited at site from roadway cutting and excavation from drain and foundation of other structures graded and compacted to meet requirement of Table 300-2 complete as per specifications which includes watering charges and compaction. (Page 144, Item No. 19.60 SR 2014-15)								
	6th cross road 6th sub cross	cum	2	202.50	0.50	0.30	60.75		
	6th cross road 7th sub cross	cum	2	202.50	0.50	0.30	60.75		
	6th cross road 8th sub cross	cum	2	202.50	0.50	0.30	60.75		
	6th cross road 9th sub cross	cum	2	202.50	0.50	0.30	60.75		
	6th cross road 10th sub cross	cum	2	135.00	0.50	0.30	40.50		
	Hebbal lake road	cum	2	180.00	0.50	0.30	54.00		
	5th cross, 7th cross road	cum	2	135.00	0.50	0.30	40.50		
	5th cross, 8th cross road	cum	2	135.00	0.50	0.30	40.50		
	5th cross, 9th cross road	cum	2	135.00	0.50	0.30	40.50		
	1st main road	cum	2	103.50	0.50	0.30	31.05		
	2nd main road	cum	2	162.00	0.50	0.30	48.60		
	3rd main road	cum	2	162.00	0.50	0.30	48.60		
	4th main road	cum	2	162.00	0.50	0.30	48.60		
	5th main road	cum	2	148.50	0.50	0.30	44.55		
	6th main road	cum	2	153.00	0.50	0.30	45.90		
	7th main road	cum	2	112.50	0.50	0.30	33.75		
	8th main road	cum	2	180.00	0.50	0.30	54.00		
							814.05	166.32	135393.00
	Basic Rate	154.00							
	Area Weightage @ 8%	12.32							
	Total	166.32							
5	Refixing stone slabs of drains and pointing in C.M (1:3) Page No. 25 / Item No. 5.33 / PWD SR 2014-15								
	70 % of the quantity vide item No. 1	Sqm	Qty Vide Item No. 1				5852.38	75.60	442440.00
	Basic Rate	70.00							
	Area Weightage @ 8%	5.60							
	Total	75.60							
6	Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete. (10.0 cms thick) (P.No.28, I.No.5.31.1 of PW,P&IWTD SR 2014-15.)								
	Balance qty vide item No. 2 & 4	sqm					2508.17	704.16	1766153.00
	Basic Rate Rs.	652.00							
	Add 8% A.W Rs.	52.16							
	Total Rate Rs.	704.16							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
7	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T & P and scaffolding wherever necessary, sorting the dismantled material, disposal of unservicea ble material and stacking the serviceable material with all lifts complete as per specifications. - RCC grade M20 and above (PWDSR 2014-15, I. 18.19, P. 133)								
	existing culverts	Cum	13	5.90	1.50	0.230	26.46		
							26.46	954.72	25263.00
	Basic Rate	884.00							
	Area Weightage @8%	70.72							
	Total	954.72							
8	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T & P and scaffolding wherever necessary, sorting the dismantled material, disposal of unservicea ble material and stacking the serviceable material with all lifts complete as per specifications.- Rubble stone masonry in cement mortar (PWDSR 2014-15, I. 18.27, P. 134)								
	existing culverts	cum	26	5.90	0.45	0.80	55.22		
							55.22	993.60	54871.00
	Basic Rate	920.00							
	Area Weightage @8%	73.60							
	Total	993.60							
9	KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180 kgs with 40mm and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregares @ 0.57 cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2. No. 12/ Item No. 4.3/ PWD SR 2014-15								
	culverts across cross roads in balaji layout and sahakarnagar	Cum	13	5.90	2.20	0.15	25.31		
							25.31	4847.04	122683.00
	Basic Rate	4488.00							
	Area Weightage @8%	359.04							
	Total	4847.04							
10	KSRB 5.4-3: Providing and constructing granite / trap / basalt size stone masonry in superstructure with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 Page No. 23 / Item No. 5.12 / PWD SR 2014-15								
	culverts across cross roads in balaji layout and sahakarnagar	Cum	26	5.90	0.60	0.90	82.84		
A	With Available stones								
	70% of qty vide item No. 2	cum					38.65	3585.60	138583.00
	Basic Rate	4420.00							
	Deduct cost of available stones 100*10/each	1000.00							
	Deduct 10% overhead charges (1000*10%)	100.00							
	Net rate	3320.00							
	Area Weightage @ 8%	265.60							
	Total	3585.60							
B	With New stones								

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	balance quantity	cum					44.19	4773.60	210926.00
	Basic Rate	4420.00							
	Area Weightage @8%	353.60							
	Total	4773.60							
11	KSRB 15.1.4: Providing ruled pointing to coursed stone masonry with cement mortar 1:4, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications cement mortar 1:4. Page No. 109 / Item No. 15.4 / PWD SR 2014-15								
	culverts across cross roads in balaji layout and sahakarnagar	Sqm	52	5.90		0.90	10.62		
							10.62	92.88	986.00
	Basic Rate	86.00							
	Area Weightage @ 8%	6.88							
	Total	92.88							
12	KSRB 4-1.6 : Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240 kgs with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2. No. 12/ Item No. 4.6/ PWD SR 2014-15								
	coping	Cum	26	5.90	0.60	0.10	9.20		
	Ramp	Cum	26	5.90	0.60	0.15	1.06		
							10.27	5327.64	54694.00
	Basic Rate	4933.00							
	Area Weightage @ 8%	394.64							
	Total	5327.64							
13	KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 320 kgs, with 20mm and down size graded granite metal, coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum with superplastisiser @ 3lts confirming to IS 9103-1999 reaffirmed-2008 machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, walls (any thickness) including attached plasters, column, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc, including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1,4.6, No. 13/ Item No. 4.11/ PWD SR 2014-15								
	deck slab	cum	13	5.90	1.80	0.225	31.06		
							31.06	6065.28	188388.00
	Basic Rate	5616.00							
	Area Weightage @ 8%	449.28							
	Total	6065.28							
14	KSRB 4.9.1: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications.Specification No. KBS 4.6.3 Page No. 17 / Item No. 4.46.3 / PWD SR 2014-15								
	For slab @ 70 Kg / Cum	Tonne	0.70	31.06			2.17	79056.00	171884.00
	Basic Rate	73200.00							
	Area Weightage @ 8%	5856.00							
	Total	79056.00							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
15	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification NO KBS 4.6.2 Page No. 15 / Item No. 4.31/ PWD SR 2014-15								
	Beneath slab	Sqm	13	5.90	0.90		69.03		
	sides of slab	Sqm	26	5.90		0.225	34.51		
		Sqm	26	1.80		0.225	10.53		
							114.07	292.68	33386.00
	Basic Rate	271.00							
	Area Weightage @ 8%	21.68							
	Total	292.68							
16	KSRRB 500-3: Scarifying existing stone metal layer upto 75mm thick along with their bituminous surface, picking up scarified materials and stacking of old serviceable materials with lead of 100m, sequential spreading of the salvaged aggregates with fresh aggregates on prepared base and consolidating as per water bound macadam specifications including cost of all labour, HOM of machineries complete as per specifications. MORTH chapter 5, No. 157 / Item No. 21.3 / PWD SR 2014-15								
	pot hole filling	Sqm	50	2.00	2.50		250.00		
	chandrappa hotel road, C Block and cross roads	Sqm	1	43.00	7.00		301.00		
							551.00	82.94	45702.00
	Basic Rate	76.80							
	Area Weightage @ 8%	6.14							
	Total	82.94							
17	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications Page No. 154 / Item No. 20.18 PWD SR - 2014-15.								
	pot hole filling	Cum	50	2.00	2.50	0.20	50.00		
	chandrappa hotel road, C Block and cross	Cum	1	43.00	7.00	0.30	90.30		
							140.30	1438.56	201830.00
	Basic Rate	1332.00							
	Area Weightage @ 8%	106.56							
	Total	1438.56							
18	KSRRB 500-1.1 : Cleaning the existing WBM road surface including removing of binding materials and other foreign matter with wire bushes and small picks, sweeping with brooms or soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries, curing complete as per specifications. Specification No. 500-1.3 P. 157 / I. 21.1 PWDSR 2014-15								
	pot hole filling	Sqm	50	2.00	2.50		250.00		
	chandrappa hotel road, C Block and cross	Sqm	1	43.00	7.00		301.00		
							551.00	12.20	6724.00
	Basic Rate	11.30							
	Area Weightage @ 8%	0.90							
	Total	12.20							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
19	KSRRB M500-6: Providing and applying primer coat for surfaces of medium porosity like cement stabilized soil base @ 1.10 Kg/Sqmt over prepared surface with S.S bitumen emulsion using bitumen tanker fitted with spray set (excluding cleaning of road surface) including cost of all material, labour HOM of machineries complete as per specifications. MORTH specification NO. 502, Page No. 157 / Item No. 21.5 / PWD SR 2014-15								
	Qty vide item no. 17	Sqm	1				551.00		
							551.00	74.52	41061.00
	Basic Rate	69.00							
	Area Weightage @ 8%	5.52							
	Total	74.52							
20	KSRRB 500-1.2 : Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. (P. 157 / I. 21.2 PWDSR 2014-15)								
	balance stretch of road	sqm	1	165.00	7.00		1155.00		
							1155.00	3.02	3493.00
	Basic Rate	2.80							
	Area Weightage @ 8%	0.22							
	Total	3.02							
21	KSRRB M500-7: Providing and applying tack coat using 80/100 grade bitumen (VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all material, labour HOM of machineries complete as per specifications. (Page No. 157 / Item No. 21.7 / PWD SR 2014-15)								
	Qty vide item No. 16	sqm					1155.00	18.74	21642.00
	Basic Rate	17.35							
	Area Weightage @ 8%	1.39							
	Total	18.74							
22	KSRRB M500-18: Providing and laying semi dense bituminous concrete using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desired compaction as per MORTH specifications clause No. 508 complete in all respects as per specifications. using 100-120 TPH capacity H.M.P with sensor paver grading II (25-30mm) with 5% CRMB-55 grade, No. 160 / Item No. 21.21.2 / PWD SR 2014-15								
	pot hole filling	Cum	50	2.00	2.50	0.025	6.25		
	chandrappa hotel road, C Block and cross roads	Cum	1	208.00	7.00	0.025	36.40		
							42.65		
	Consider 10% For Depression Filling						4.27		
							46.92	8702.64	408284.00
	Basic Rate	8058.00							
	Area Weightage @ 8%	644.64							
	Total	8702.64							
23	Lead for Disposal of Debris shall be payable at carriage rates by Mechanical means inlcuding loading and unloading. From 0.00 to 2.00 Km (Page No.123)								
			Vide Item No. (2*0.85+3+4)				1415.56	73.57	104142.00
	Average weight of earth 1.28 tonne / kg for 2x1.28x2.00=5.12	5.12							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	Add loading and unloading charges Vide item no.17.1 P.no.130	63.00							
		68.12							
	Area Weightage @ 8%	5.45							
	Total	73.57							
24	Sub Total								4819363.00
25	For survey work, levelling work and drawings @ 0.5% of est cost								24097.00
26	For Third Part QC inspection Charges @ 1% of Estimate Cost								48194.00
27	Miscellaneous and other Charges	L/S							8346.00
								Total	4900000.00
	(Rs. Forty Nine Lakhs Only)								

CERTIFICATE:

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per PWD SR of 2014-15.
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

Assistant Engineer
Ward No. 8
BBMP

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP

Executive Engineer
Byatarayanapura Division
BBMP

Technical Sanction
Accorded For 49.00 lakh Rs.
Head of A/C P3089
CER NO : 43 **Dt:** 21.8.15

TA. CE (YNK).

ADMINISTRATIVELY SANCTIONED FOR Rs. 49.00 lacs
Rupees Forty nine lacs only
Under P-3089

Registered as EE ( ) No 9.....9....
Subject to conditions contained in
enclosed memo EE ( ) No /9/...
Dt Estimate A/Sanctioned
JC(Y)/PP/15-16/ No 28/2015-16
dated 20/8/2015 Rs. 49.00 lacs

Joint Commissioner
(Yelahanka Zone)
BBMP, Bengaluru-92